

POC in macaques for alpha prime-protein boost strategy

Study design (prime at 0, 4, 8 wks; boost at 24, 36, 58 wks)

- 3 x IN VEE/SIN, 3 x IM Env protein
- 3 x IR VEE/SIN, 3 x IM Env protein
- 3 x IM VEE/SIN, 3 x IM Env protein
- 6 x IM VEE/SIN
- 3 x IM DNA/PLG, 3 x IM Env protein
- Naïve controls

Vaccine components

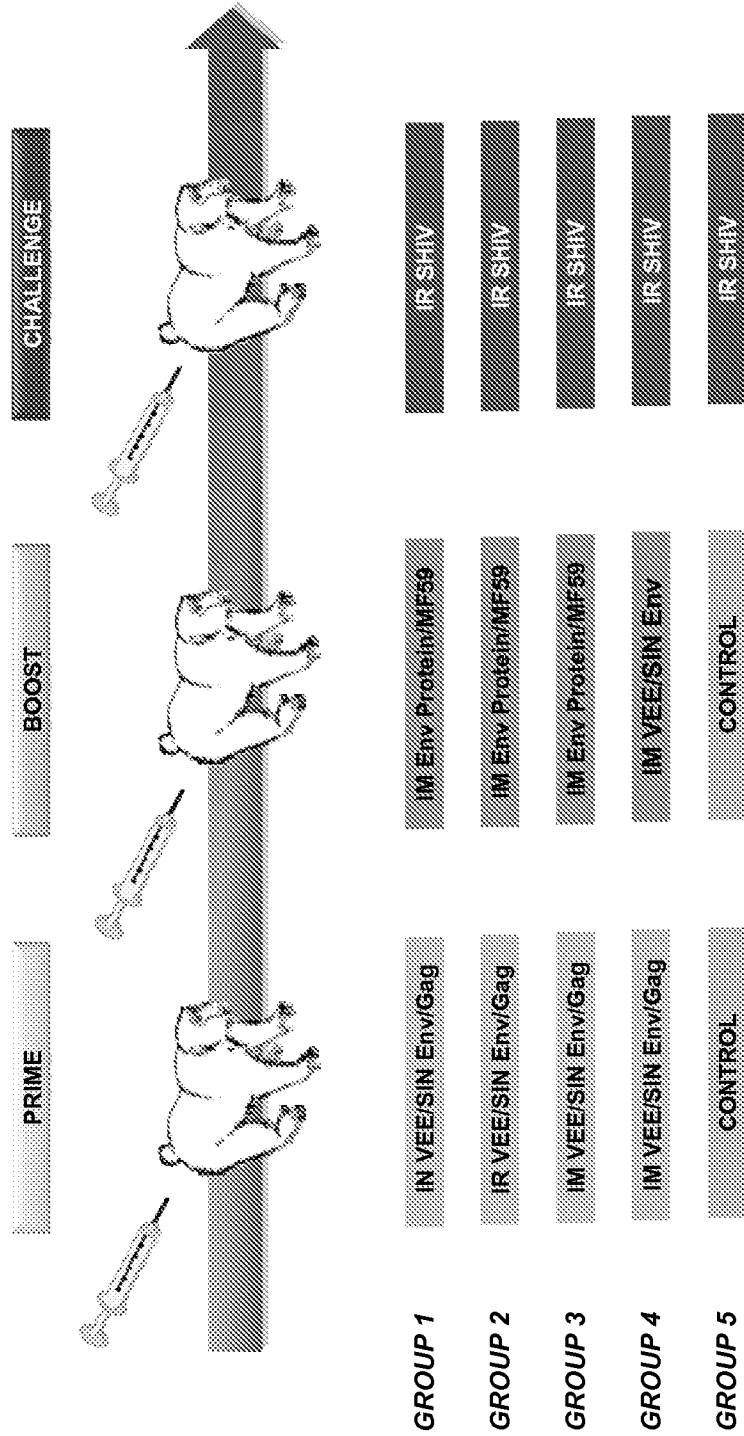
- SIV gag and HIV Env VEE/SIN replicon particles (10^8)
- SIV gag and HIV Env plasmid DNA on PLG microparticles (1 mg DNA)
- 100 μ g SF162 o-gp140 Δ V2 protein in MF59

Virus challenge

- SHIV_{SF162P4} (pathogenic CCR5 using, SIV/HIV chimera)
- 1800 TCID50 given intrarectally (IR) at 4 wks post final immunization

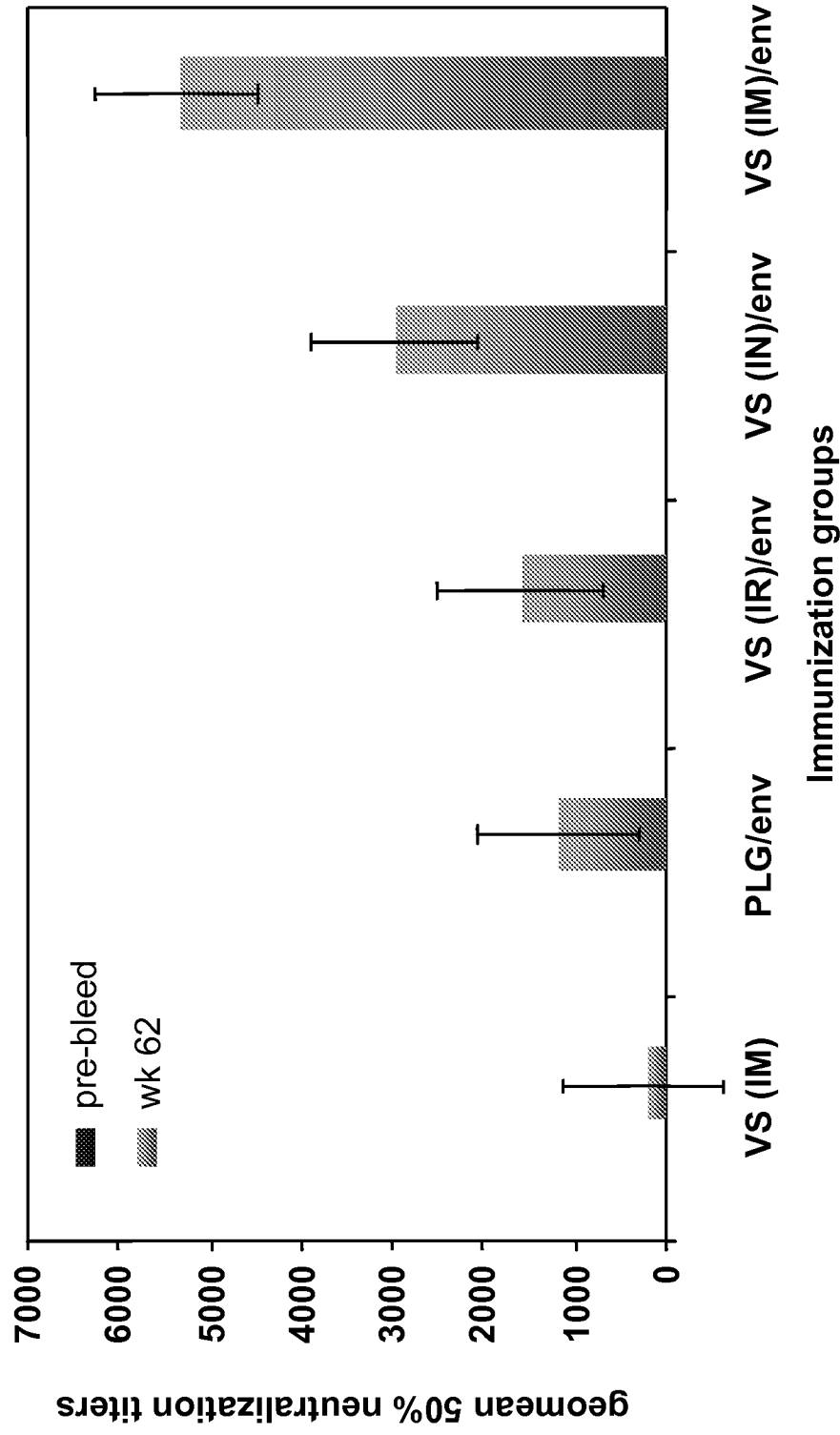
Alphavirus replicon prime-protein boost HIV vaccine

Immunization and SHIV challenge study design



VEE/SIN SIV gag and VEE/SIN HIV-1SF162 o-gp140ΔV2 (1E8 doses at 0, 4, 8 wks)
HIV-1SF162 o-gp140ΔV2 protein (100ug dose in MF59 adjuvant at 24, 36, 58 wks)
Intrarectal SHIV SF162 P4 challenge (1800 hu TCID50: approx.10 MID50 at 62 wks)

Neutralizing antibodies (SF162) on day of challenge



Protection vs. intrarectal SHIV challenge in macaques immunized with VEE/SIN Env & boosted with Env protein

